



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/690,673	10/16/2000	Arthur James Neufeld	QCPA000128	3260

23696 7590 03/10/2004

Qualcomm Incorporated  
Patents Department  
5775 Morehouse Drive  
San Diego, CA 92121-1714

EXAMINER
----------

FERGUSON, KEITH

ART UNIT	PAPER NUMBER
2683	10

DATE MAILED: 03/10/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

**Application No.**

09/690,673

**Applicant(s)**

NEUFELD, ARTHUR JAMES

**Examiner**

Keith T. Ferguson

**Art Unit**

2683

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 29 December 2003.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-22 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-22 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |   |   |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                        | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)    | Paper No(s)/Mail Date. _____  |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____   | 6) <input type="checkbox"/> Other: _____                                    |

Art Unit: 2683

**DETAILED ACTION**

***Claim Rejections - 35 USC § 102***

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claims 1,11,21 and 22 rejected under 35 U.S.C. 102(e) as being anticipated by Shohora et al..

The claimed invention reads on Shohora et al. as follows:  
Regarding claims 1,11,21 and 22, Shohora et al. discloses a method/Wireless Communications Device (WCD)/computer program product with reduced power consumption (col. 10 lines 35-38), the WCD operating in sleep and awake modes during monitoring of a slotted paging channel (col. 20 lines 20-46), comprising: means for providing a plurality of counters (fig. 2 numbers 80,78,88 and 100); means for establishing a roll over point for each

Art Unit: 2683

counter at a predetermined offset relative to each other counter (col. 13 lines 10-15); means for identifying a timing point (S-D-1) for at least one roll over point (col. 13 lines 10-15); and means (controller) for transitioning between the sleep and awake modes during the occurrence of an identified timing point (fig. 2 number 50 and col. 13 lines 49-58).

***Claim Rejections - 35 USC § 102***

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

4. Claims 1-2,5,6,8,10,11,12,15,18 and 20-22 are rejected under 35 U.S.C. 102(a) as being anticipated by Easton et al. (WO 00/04738).

The claimed invention reads on Easton et al. as follows:  
Regarding claims 1,11,21 and 22, Easton et al. discloses a method of reducing average power consumption in a wireless communication device (WCD) (page 4 lines 21-31), the WCD operating in sleep and awake modes during monitoring of a slotted paging channel (page 5 lines 21-31), comprising: providing a

Art Unit: 2683

plurality of counters (fig. 1 numbers 203,224,208); establishing a roll over point for each counter at a predetermined offset relative to each other counter (page 6 line (page 6 lines 10-37); identifying a timing point for at least one roll over point (page 6 lines 17-22); and a controller (microprocessor) that transitioning between the sleep and awake modes during the occurrence of an identified timing point (page 6 line 38 through page 7 line 10).

Regarding claims 2 and 12, Easton et al. discloses spacing each of the plurality of counters at substantially equal time increments around a PN sequence period (page 9 line 17-23).

Regarding claims 5 and 15, Easton et al. discloses the controller commencing awake mode operation at a predetermined number of timing points before the beginning of a paging channel slot assigned to the WCD (page 8 line 21-24).

Regarding claims 6 and 16, Easton et al. discloses the controller commencing sleep mode operation at a predetermined number of timing points after the beginning of a paging channel slot assigned to the WCD (page 8 line 25-28).

Regarding claims 8 and 18, Easton et al. discloses the controller commencing sleep mode operation at a first occurring timing point after the WCD determines there is no paging traffic to decode during a paging channel slot assigned to the WCD (col. 6 line 37 though page 7 line 4).

Regarding claims 10 and 20, Easton et al. discloses in accordance with IS-95 (page 6 line 4).

Art Unit: 2683

***Claim Rejections - 35 USC § 103***

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 3,4,13 and 14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Easton et al. in view of Naruse.

Regarding claims 3,4,13 and 14, Easton et al. discloses a method as discussed supra in claims 1 and 11. Easton et al. differs from claims 3,4,13 and 14 of the claimed invention in that it do not disclose synchronizing each of the plurality of counters to a corresponding pseudonoise (PN) sequence generator and shifting each of the corresponding PN sequence generators by an offset, thereby enabling the demodulation of a corresponding multipath transmission component. Naruse teaches synchronizing each of the plurality of counters to a corresponding pseudonoise (PN) sequence generator (col. 4 lines 47-60 and col. 8 lines 1-14) and shifting each of the corresponding PN sequence generators by an offset (col. 6 lines 37-44), thereby enabling the demodulation of a corresponding multipath transmission component (col. 6 lines 37-44). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made provide Easton et al. with synchronizing each of the plurality of counters to a corresponding pseudonoise (PN) sequence generator and shifting each of the corresponding PN sequence generators by an offset, thereby enabling the demodulation of a corresponding multipath transmission component in order to synchronize with base station by going into the sleep mode which saves electric power in the portable telephone when waiting for a message, as taught by Naruse.

Art Unit: 2683

7. Claims 7,9,17 and 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Easton et al. in view of Banister.

Easton et al. discloses a method as discussed supra in claims 1 and 11. Easton et al. differs from claims 7 and 17 of the claimed invention in that it do not disclose commencing awake mode operation two timing points before the beginning of a paging channel slot assigned to the WCD. Banister teaches commencing awake mode operation two timing points before the beginning of a paging channel slot assigned to the WCD (fig. 3). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to provide Easton et al. with commencing awake mode operation two timing points before the beginning of a paging channel slot assigned to the WCD in order allow the portable telephone to warm up and calculate its wake up time, as taught by Banister.

Regarding claims 9 and 19, Easton et al. discloses a method as discussed supra in claims 1 and 11. Easton et al. differs from claims 9 and 19 of the claimed invention in that it do not disclose the slotted paging channel carries code division multiple access (CDMA) signals. Banister teaches the slotted paging channel carries code division multiple access (CDMA) signals (col. 4 line 35-39). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to provide Easton et al. with slotted paging channel carries code division multiple access (CDMA) signals in order for the portable telephone to monitor a specific time slot for messages, as taught by Banister.

### ***Response to Arguments***

1. Applicant's arguments filed December 29, 2003 have been fully considered but they are not deemed to be persuasive. The following are explanations to the applicant arguments:

Art Unit: 2683

2. Argument: Applicant alleges that claims 1,11 and 21-22 are rejected under two separate section 102 rejections. Applicant requested the examiner to withdraw one of the 102 rejections so that the applicant can properly respond.

Explanation: Examiner agreed with the applicant, however, the examiner explained to the applicant that multiple 102 rejections could be made to the claim rejections, as long as they defined the applicant invention. It is up to the applicant to address each 102 rejection, or explain why using the MPEP to overcome examiner explanation. Applicant addressed that he did not find strong support in the MPEP and would like for the examiner to send the next office action. Since the examiner and the applicant address this matter over the telephone, the examiner agreed to send a non-final office action and reset the date.

#### ***Conclusion***


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Keith T. Ferguson whose telephone number is (703) 305-4888. The examiner can normally be reached on 6:30am-5:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, William Trost can be reached on (703) 308-5318. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.



Art Unit: 2683

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Keith Ferguson   
Art Unit 2683  
February 25, 2004